

TIMING RING MECHANISM

ABSTRACT

A method and system for scheduling threads and timer mechanisms of events in a computer system that includes a central processing unit (CPU), a plurality of input/output (I/O) devices, such devices as storage devices, network interface devices (NIDs) and a memory which is typically used to store various applications or other instructions which, when invoked enable the CPU to perform various tasks. the timer structure provides a ring structure and an associated control block is provided. The timer mechanism of the present invention comprises a ring structure that includes an array of ring slots, with the slots relating to pointers for implementing a circular array of LIFO (Last In, First Out) queues generally where each LIFO queue maintains a listing of EventDescriptors that relate to functions which must be performed during the time slot associated with the particular pointer position.